CLAIMS

1. Method for managing applications, making use of at least two physical machines linked by communication means, these machines comprising a physical structure on which is loaded a first software layer adapted to this machine as well as a second layer forming a virtual layer on which virtual machines will operate, the latter comprising at least one application, this method comprising the following steps:

- connection of at least two physical machines for the formation of a physical machine network,
- loading of a control programme associated to the virtual layer of each physical machine,
- establishment of a dialogue between the control programme and a system management process,
- establishment of a physical machine network including the virtual layers,
- definition by the system management process of a service containing several applications,
- communication between the management process and each virtual layer in order to determine the status of the virtual machines associated to said virtual layer,
- assignation of a virtual machine to one of the virtual layers taking into account the characteristics of the application.

2. Method according to claim 1, **wherein** the control programme includes means to determine the status of each physical machine on which a virtual layer is placed and to communicate this status to the management process by communication means.

3. Method according to claim 1, **wherein** the control programme includes means to determine the status of each virtual machine associated to a virtual layer of the concerned physical machine and communicates this status to the management process by communication means.

4. Method according to claim 1, **wherein** the management process carries out the following steps:

- determination of the characteristics of the virtual machines and of the resources necessary for their operation,
- assignation of a virtual machine with the virtual layer of a physical machine,
- surveillance of the operating status of a virtual machine thanks to the control programme,
- association of the status of each virtual machine forming a service,
- transmission of this status to an operator.

5. Method according to claim 4, **wherein** the management process carries out the following steps during a displacement of a virtual machine of a first physical machine on a second physical machine:

- transmission of a stop instruction to the control programme situated on the first physical machine,
- establishment of the data pertaining to the stopped virtual machine located on the first physical machine,
- transfer of this data towards the second physical machine,
- assignation of the stopped virtual machine towards the second physical machine,
- reactivation of the virtual machine.

6. Method according to claim 5, **wherein** once the virtual machine has been successfully reactivated, the management process transmits the instruction to the control programme of the first machine to suppress the data pertaining to this virtual machine.

7. Method according to claim 1, **wherein** the management process includes a definition of the operating constraints of the virtual machines relative to a service and wherein the assignation of a virtual machine to a virtual layer of a physical machine as well as the displacement of said virtual machine towards another virtual layer takes into account these constraints.